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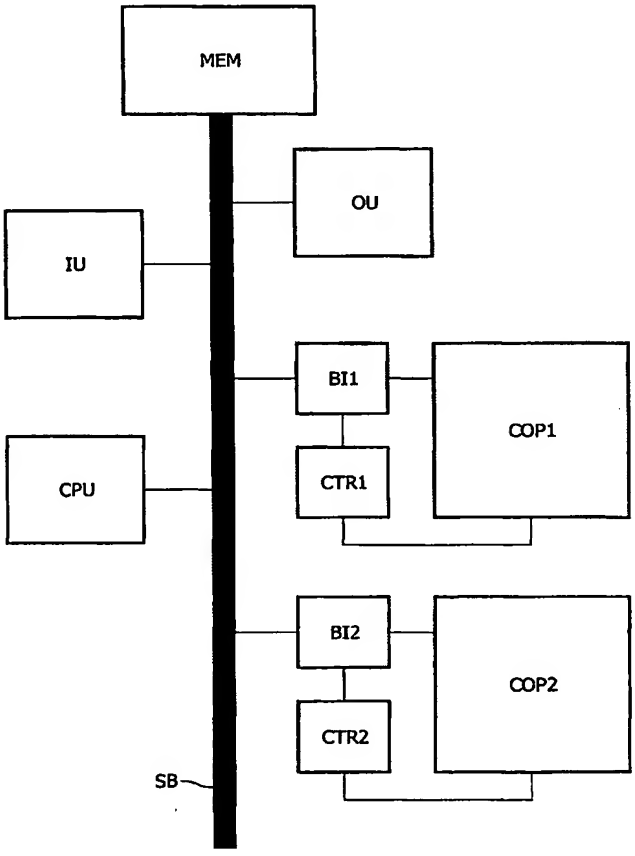
(54) Title: FLEXIBLE POWER REDUCTION FOR EMBEDDED COMPONENTS



(57) Abstract: Programmable platforms include components such as a central processing unit (CPU), coprocessors (COP I, COP2), and a shared system bus (SB) that connects the various processors. In media processing applications, the processing of the functions is distributed to the central processing unit and the coprocessors. Such functions may be effected in hardware, in software, or in a mixture thereof. The utilization of each coprocessor may vary both for different applications as well during execution of a single application, depending on the character of the media processing application. As a result, one or more coprocessors may not be effectively utilized during a certain part of the media processing. In case of a synchronous system those coprocessors continue consuming power. According to the invention, a coprocessor can be powered down by a local controller, depending on the workload of that coprocessor. As a result, power control is distributed and automatic, and only depends on required processing capacity of the coprocessor.

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